CLAIMS:

1.   A receiver for receiving and processing data frames transmitted over a transmission channel, comprising:

a) verification means for verifying the validity of data frames received, for detecting and identifying non-erroneous and erroneous data frames among the data frames received, said erroneous data frames being of a corrigible or incorrigible nature,

b) correction means for correcting errors, which means act on corrigible erroneous received data frames so as to generate corrected data frames,

characterized in that it comprises:

c) comparison means for comparing received erroneous data frames with corresponding corrected data frames for estimating a minimum error rate involved in the transmission of the received data frames,

d) analysis means for analyzing incorrigible erroneous received data frames for estimating a maximum error rate involved in the transmission of the received data frames,

e) transmission means for transmitting information relating to said minimum and maximum error rates to a remote device.

2.   A receiver as claimed in claim 1, characterized in that the comparison means comprise a binary bit-by-bit operator of the "EXCLUSIVE OR" type applied between the received erroneous data frames and the corresponding corrected data frames, so as to generate an output word indicative of the number of corrected bits contained in said corrected data frames.

3.   A receiver as claimed in claim 1, characterized in that the analysis means for analyzing the received incorrigible erroneous data frames comprise:

a) a summation device for indicating the number of bits contained in said incorrigible data frames,

b) an adder device for adding the number of corrected bits contained in the corrected data frames to said number of bits contained in the incorrigible data frames.

4.   A communication system for transmitting data frames between a transmitter and a receiver via a communication channel, said transmitter comprising protection means for protecting transmitted frames, while said receiver comprises:

a) verification means for verifying the validity of data frames received, for detecting and identifying non-erroneous and erroneous data frames among the data frames received, said erroneous data frames being of a corrigible or incorrigible nature,

b) correction means for correcting errors, which means act on corrigible erroneous received data frames so as to generate corrected data frames,

characterized in that the receiver comprises:

c) comparison means for comparing received erroneous data frames with corresponding corrected data frames for estimating a minimum error rate involved in the transmission of the received data frames,

d) analysis means for analyzing incorrigible erroneous received data frames for estimating a maximum error rate involved in the transmission of the received data frames,

e) transmission means for transmitting information relating to said minimum and maximum error rates to a remote device.

5.   A communication system as claimed in claim 4, characterized in that the transmitter comprises adaptation means for adapting the protection of the frames transmitted to the receiver to said minimum and maximum error rates.

6.   A telephone equipment comprising a receiver as claimed in claim 1.

7.   A method of estimating errors at the level of a receiver for estimating the errors on a transmission channel, which method comprises:

a) a verification step for verifying the validity of the received data frames so as to detect and identify the erroneous data frames received and the non-erroneous data frames received,

b) an error correction step carried out on those received erroneous data frames which can be corrected so as to generate corrected data frames,

characterized in that it comprises the following steps:

c) a comparison step for comparing received erroneous data frames with corresponding corrected data frames so as to estimate a minimum error rate involved in the transmission of the received data frames,

d) an analysis step for analyzing received incorrigible erroneous data frames so as to estimate a maximum error rate involved in the transmission of the received data frames.

8. A method as claimed in claim 7, characterized in that said comparison step comprises a binary bit-by-bit operation of the (EXCLUSIVE OR) type applied between the received erroneous data frames and the corresponding corrected data frames so as to generate an output word indicative of the number of corrected bits contained in said frames of corrected data.

9. A method as claimed in claim 7, characterized in that the analysis step for analyzing the received incorrigible erroneous data frames comprises:

a) a summation sub-step indicating the number of bits contained in said incorrigible data frames,

b) an addition sub-step for adding the number of corrected bits contained in the corrected data frames to the number of bits contained in the incorrigible data frames.

10. An error protection method for data frames transmitted between a transmitter and a receiver via a communication channel, said transmitter comprising a protection step for the transmitted frames, while said receiver comprises:

a) a verification step for verifying the validity of the received data frames so as to detect and identify the received erroneous data frames and the received non-erroneous data frames,

b) an error correction step carried out on those received erroneous data frames which can be corrected so as to generate corrected data frames,

characterized in that:

c) the receiver comprises a comparison step for comparing received erroneous data frames with corresponding corrected data frames so as to estimate a minimum error rate involved in the transmission of the received data frames,

d) the receiver comprises an analysis step for analyzing received incorrigible erroneous data frames so as to estimate a maximum error rate involved in the transmission of the received data frames,

e) the receiver comprises a transmission step for transmitting said minimum and maximum error rates to said transmitter,

f) the transmitter comprises an adaptation step in which the protection of the frames transmitted to the receiver is adapted to said minimum and maximum error rates.